

### **AMENDMENT TO THE CLAIMS**

**Claim 1 (Previously Presented)** A frame generating method comprising:

inserting a synchronous word into data at a position in order to generate a frame, the position being determined based on a known time “t” of a noise cycle of a transmission line, the known time “t” of the noise cycle being a measurement of time between an occurrence of cyclical noises on the transmission line; and

transmitting the generated frame from a transmitter to a receiver via the transmission line, wherein the cyclical noises occur at every time “t” in the data, and

wherein a length of the synchronous word is approximately equal to a multiple of a length of the noise cycle by a natural number.

**Claim 2 (Previously Presented)** A frame generating method as recited in claim 1, wherein said position is arranged according to a predetermined arrangement algorithm.

**Claim 3 (Previously Presented)** A frame generating method as recited in claim 2, wherein a parameter of the predetermined arrangement algorithm comprises at least one of a length of the synchronous word and an arrangement interval of the synchronous word.

**Claim 4 (Cancelled)**

**Claim 5 (Previously Presented)** A frame generating method comprising:

inserting a plurality of synchronous words into data at a position in order to generate a frame, the position being determined based on a known time “t” of a noise cycle of a transmission line, the known time “t” of the noise cycle being a measurement of time between an occurrence of cyclical noises on the transmission line; and

transmitting the generated frame from a transmitter to a receiver via the transmission line, wherein the cyclical noises occur at every time “t” in the data, and

wherein a length of each synchronous word is approximately equal to a multiple of a

length of the noise cycle by a natural number.

**Claim 6 (Previously Presented)** A frame generating method as recited in claim 5, wherein said inserting a plurality of synchronous words into data arranges the plurality of synchronous words over a section of frame as long as the noise cycle.

**Claim 7 (Previously Presented)** A frame generating method as recited in claim 5, wherein a length of an arrangement interval of at least two of the plurality of synchronous words is different from a length of the noise cycle.

**Claim 8 (Previously Presented)** A frame generating method as recited in claim 5, wherein at least two of the plurality of synchronous words are arranged using the same pattern.

**Claim 9 (Previously Presented)** A frame generating method as recited in claim 1, wherein a length of the noise cycle is the length of a time interval whose noise level in the transmission line is beyond a predetermined threshold.

**Claim 10 (New)** A frame generating method as recited in claim 1, wherein the cyclical noises are naturally occurring noises which are not intentionally transmitted on the transmission line.

**Claim 11 (New)** A frame generating method as recited in claim 5, wherein the cyclical noises are naturally occurring noises which are not intentionally transmitted on the transmission line.